

SOIL NAIL RETAINING WALL #19B							
STA. -L-	OFFSET FROM -L- (LT) TIER 1	OFFSET FROM -L- (LT) TIER 2	ELEV. @ TOP OF WALL	BOW PROPOSED FINISHED GRADE ELEV.	TOP OF LEVELING PAD ELEV.	ESTIMATED WALL EMBEDMENT	WALL DESIGN HEIGHT "H"
382+30.00	59.50	70.50	3180.46	3124.84	3123.84	1.00	55.62
382+50.00	59.50	70.50	3180.36	3125.12	3124.12	1.00	55.24
383+00.00	57.73	68.73	3178.69	3125.81	3124.81	1.00	52.88
383+50.00	55.72	66.72	3177.51	3126.58	3125.58	1.00	50.93
384+00.00	55.50	66.50	3177.26	3127.16	3126.16	1.00	50.10
384+50.00	55.50	66.50	3175.07	3127.49	3126.49	1.00	47.58
385+00.00	55.50	66.50	3170.34	3127.57	3126.57	1.00	42.77
385+50.00	55.50	66.50	3168.91	3127.31	3126.31	1.00	41.60
386+00.00	55.23	66.23	3169.58	3126.82	3125.82	1.00	42.76
386+50.00	54.84	65.84	3169.83	3126.09	3125.09	1.00	43.74
387+00.00	54.45	65.45	3171.18	3125.11	3124.11	1.00	46.07
387+50.00	54.06	65.06	3167.21	3123.89	3122.89	1.00	43.32
388+00.00	53.67	64.67	3161.20	3122.52	3121.52	1.00	38.68
388+50.00	53.28	64.28	3156.13	3120.92	3119.92	1.00	35.21
388+60.00	53.20	64.20	3155.43	3120.52	3119.52	1.00	34.91
388+69.50	-	64.13	3150.69	3120.13	3119.13	1.00	30.56
388+69.50	53.13	-	3150.49	3120.13	3119.13	1.00	30.36
389+00.00	52.89	-	3148.78	3119.07	3118.07	1.00	29.71
389+50.00	52.50	-	3145.88	3116.98	3115.98	1.00	28.90
390+00.00	52.50	-	3141.38	3114.68	3113.68	1.00	26.70
390+50.00	52.50	-	3138.08	3111.90	3110.90	1.00	26.18
391+00.00	52.50	-	3126.66	3108.67	3107.67	1.00	17.99
391+50.00	52.50	-	3114.01	3105.20	3104.20	1.00	8.81
391+90.00	52.50	-	3111.27	3102.33	3101.33	1.00	8.94
392+00.00	52.50	-	3111.46	3101.61	3100.61	1.00	9.85
392+50.00	52.50	-	3132.65	3098.02	3097.02	1.00	34.63
392+78.48	52.50	-	3135.27	3096.08	3095.08	1.00	39.19
393+00.00	52.50	-	3133.97	3094.48	3093.48	1.00	39.49
393+22.57	52.50	-	3130.56	3092.60	3091.60	1.00	37.96
393+22.57	52.50	-	3130.56	3094.94	3093.94	1.00	35.62
393+50.00	59.91	-	3130.42	3092.90	3091.90	1.00	37.52
394+00.00	74.57	-	3123.61	3089.16	3088.16	1.00	34.45
394+50.00	87.49	-	3107.94	3085.08	3084.08	1.00	22.86
394+57.00	87.20	-	3107.20	3084.53	3083.53	1.00	22.67
395+00.00	66.22	-	3115.49	3081.16	3080.16	1.00	34.33
395+32.70	43.00	-	3106.11	3078.55	3077.55	1.00	27.56
395+50.00	43.00	-	3101.15	3077.09	3076.09	1.00	24.06
396+00.00	43.00	-	3098.34	3072.88	3071.88	1.00	25.46
396+50.00	43.00	-	3095.29	3068.72	3067.72	1.00	26.57
397+00.00	43.00	-	3088.54	3064.71	3063.71	1.00	23.83
397+50.00	43.00	-	3082.08	3060.73	3059.73	1.00	21.35
398+00.00	43.00	-	3074.87	3056.77	3055.77	1.00	18.10
398+50.00	43.00	-	3070.47	3052.84	3051.84	1.00	17.63
399+00.00	43.00	-	3067.20	3049.01	3048.01	1.00	18.19
399+50.00	43.00	-	3071.49	3044.44	3043.44	1.00	27.05
400+00.00	43.00	-	3072.28	3040.23	3039.23	1.00	32.05
400+50.00	43.00	-	3059.43	3036.47	3035.47	1.00	22.96
401+00.00	43.00	-	3046.12	3032.67	3031.67	1.00	13.45
401+50.00	43.00	-	3053.75	3028.97	3027.97	1.00	24.78
402+00.00	43.00	-	3056.41	3025.39	3024.39	1.00	31.02
402+50.00	43.00	-	3049.70	3021.93	3020.93	1.00	27.77
403+00.00	43.00	-	3044.09	3018.56	3017.56	1.00	25.53
403+50.00	43.00	-	3038.02	3015.76	3014.76	1.00	22.26
404+00.00	42.96	-	3031.63	3013.76	3012.76	1.00	17.87
404+50.00	41.00	-	3023.17	3010.61	3009.61	1.00	12.56

ALL MEASUREMENTS IN FEET

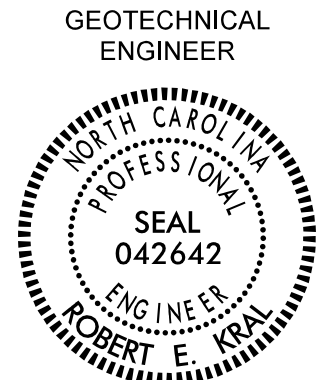

PREPARED BY: R. KRAL	DATE: 7/13/2022
REVIEWED BY: M. BREWER	DATE: 7/13/2022

SOIL NAIL RETAINING WALL #19B (CONTINUED)							
STA. -L-	OFFSET FROM -L- (LT) TIER 1	OFFSET FROM -L- (LT) TIER 2	ELEV. @ TOP OF WALL	BOW PROPOSED FINISHED GRADE ELEV.	TOP OF LEVELING PAD ELEV.	ESTIMATED WALL EMBEDMENT	WALL DESIGN HEIGHT "H"
405+00.00	38.24	-	3022.84	3007.85	3006.85	1.00	14.99
405+50.00	35.48	-	3011.81	3005.09	3004.09	1.00	6.72
406+00.00	33.50	-	3005.36	3002.44	3001.44	1.00	2.92
406+50.00	33.50	-	3013.35	2999.67	2998.67	1.00	13.68
407+00.00	33.50	-	3009.00	2996.64	2995.64	1.00	12.36
407+50.00	33.50	-	3003.74	2993.09	2992.09	1.00	10.65
408+00.00	33.50	-	2991.39	2989.56	2988.56	1.00	1.83
408+04.26	33.50	-	2989.26	2989.26	2988.26	1.00	0.00


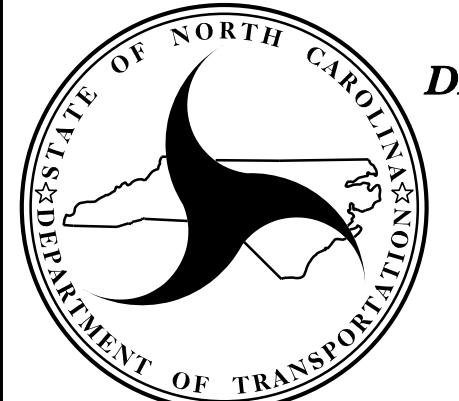
ALL MEASUREMENTS IN FEET

SOIL NAIL RETAINING WALL #19A							
STA. -L-	OFFSET FROM -L- (LT) TIER 1	OFFSET FROM -L- (LT) TIER 2	ELEV. @ TOP OF WALL	BOW PROPOSED FINISHED GRADE ELEV.	TOP OF LEVELING PAD ELEV.	ESTIMATED WALL EMBEDMENT	WALL DESIGN HEIGHT "H"
376+65.00	56.00	-	3103.80	3098.80	3097.80	1.00	5.00
376+75.00	56.00	-	3108.80	3102.10	3101.10	1.00	6.70
377+00.00	56.00	-	3112.42	3103.76	3102.76	1.00	8.66
377+50.00	56.00	-	3127.61	3106.91	3105.91	1.00	20.70
377+96.59	56.00	-	3135.18	3109.62	3108.62	1.00	25.56
377+96.59	56.00	67.00	3135.38	3109.62	3108.62	1.00	25.76
378+00.00	56.00	67.00	3137.09	3109.82	3108.82	1.00	27.27
378+20.00	56.00	67.00	3147.09	3110.90	3109.90	1.00	36.19
378+50.00	56.00	67.00	3156.35	3112.50	3111.50	1.00	43.85
379+00.00	56.00	67.00	3164.30	3114.94	3113.94	1.00	49.36
379+50.00	57.23	68.23	3170.52	3117.04	3116.04	1.00	53.48
380+00.00	56.76	67.76	3174.38	3118.89	3117.89	1.00	55.49
380+50.00	59.50	70.50	3177.74	3120.56	3119.56	1.00	57.18

ALL MEASUREMENTS IN FEET

 GEOTECHNICAL ENGINEER SEAL 042642 ROBERT E. KRAL	ENGINEER
Documented by:  SIGNATURE DATE 7/14/2022	SIGNATURE DATE
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

PROJECT NO.: A-0009CB
 GRAHAM COUNTY
 RETAINING WALL #19A: -L- 376+65, 45'-56' LT TO 380+50, 48.5'-70.5' LT
 RETAINING WALL #19B: -L- 382+30, 48.5'-70.5' LT TO 408+04, 33.5' LT
 SHEET 4 OF 11

Prepared in the Office of:  CARLINAS GEOTECHNICAL GROUP 2400 CROWNPOINT EXECUTIVE DRIVE SUITE 800 CHARLOTTE, NC 28227 (980) 339-8684	 NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS GEOTECHNICAL ENGINEERING UNIT	RETAINING WALL #19A & #19B TIERED SOIL NAIL RETAINING WALL				
REVISIONS						
NO.	BY	DATE	NO.	BY	DATE	SHEET NO.
1			3			W19-4
2			4			